

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

Claim 1. (previously presented) An isolated nucleic acid encoding a *Bacterioides fragilis* polypeptide of SEQ ID NO: 9306.

Claim 2. (original) A recombinant expression vector comprising the nucleic acid of Claim 1 operably linked to a transcription regulatory element.

Claim 3. (original) A cell comprising a recombinant expression vector of Claim 2.

Claim 4. (previously presented) A method for producing a *Bacterioides fragilis* polypeptide comprising culturing a cell of Claim 3 under conditions that permit expression of the polypeptide.

Claim 5. (previously presented) An isolated nucleic acid selected from the group consisting of:

- (a) SEQ ID NO: 4084;
- (b) a complement of SEQ ID NO: 4084; and
- (c) an RNA of (a) or (b), wherein U is substituted for T.

Claim 6. (original) A recombinant expression vector comprising the nucleic acid of Claim 5 operably linked to a transcription regulatory element.

Claim 7. (original) A cell comprising a recombinant expression vector of Claim 6.

Claim 8. (previously presented) A method of producing a *Bacterioides fragilis* polypeptide comprising culturing a cell of Claim 7 under conditions that permit expression of the polypeptide.

Claim 9. (previously presented) A probe comprising a nucleotide sequence consisting of at least twenty contiguous nucleotides of a nucleotide sequence selected from the group consisting of:

- (a) SEQ ID NO: 4084;
- (b) a complement of SEQ ID NO: 4084; and
- (c) an RNA of (a) or (b), wherein U is substituted for T.

Claim 10. (currently amended) An isolated nucleic acid encoding a ~~*B. fragilis*~~ *Bacterioides fragilis* polypeptide of at least 10 consecutive amino acids of SEQ ID NO: 9306, wherein the nucleic acid is hybridizable to a nucleic acid having a nucleotide sequence selected from the group consisting of:

- (a) SEQ ID NO: 4084;
- (b) a complement of SEQ ID NO: 4084; and
- (c) an RNA of (a) or (b), wherein U is substituted for T.

Claims 11-28. (canceled).

Claim 29. (new) A probe comprising a nucleotide sequence consisting of at least thirty contiguous nucleotides of a nucleotide sequence selected from the group consisting of:

- (a) SEQ ID NO: 4084;
- (b) a complement of SEQ ID NO: 4084; and
- (c) an RNA of (a) or (b), wherein U is substituted for T.

Claim 30. (new) An isolated nucleic acid encoding a *Bacterioides fragilis* polypeptide of at least 10 consecutive amino acids of SEQ ID NO: 9306, wherein the nucleic acid is hybridizable under stringent conditions to a nucleic acid having a nucleotide sequence selected from the group consisting of:

- (a) SEQ ID NO: 4084;
- (b) a complement of SEQ ID NO: 4084; and
- (c) an RNA of (a) or (b), wherein U is substituted for T.

Claim 31. (new) An isolated nucleic acid encoding a *Bacterioides fragilis* polypeptide of at least 20 consecutive amino acids of SEQ ID NO: 9306, wherein the nucleic acid is hybridizable under stringent conditions to a nucleic acid having a nucleotide sequence selected from the group consisting of:

- (a) SEQ ID NO: 4084;
- (b) a complement of SEQ ID NO: 4084; and
- (c) an RNA of (a) or (b), wherein U is substituted for T.